# State of California Office of Emergency Services - Fire and Rescue Branch

## **MAINTENANCE BULLETIN #35**

Subject: Care, Use and Handling of Lightweight, Synthetic, Poly-lined Fire Hose.

The following procedures shall be used in the care, use, handling and maintenance of the Lightweight, Synthetic, Poly-Lined Fire Hose provided on OES engines.

#### STORAGE:

- 1. Although this is a synthetic hose, foreign materials entrapped in the fabric can become a breeding ground for mildew. While the mildew will no attack the hose physically, it does detract from the appearance and will have an odor. It could also spread to other more susceptible equipment or apparel. You should clean the hose in mild detergent (Do NOT use solvent) and then dry it before replacing on the engine. This will ensure the longest possible life span, as well as being an opportunity to visually inspect the hose for damage.
- 2. Because the hose is so compact, it is sometimes folded in the hose bed on its edge. This should be avoided as the constant vibration of the engine could lead to premature wear on the selvage edge. The hose should always be wigwagged flat. The hose bed should also be inspected for any protrusions, rough edges or corners. If any are found, they should be removed before the hose is loaded into the truck.
- 3. When left stored for any length of time the hose should be allowed to be exposed to air.

#### **USAGE**:

Because of certain features, Lightweight, Synthetic, Poly-Lined hose cannot be handled like rubber hose. The most important difference is the breaking down and reloading aspect of it. Due to its flexible nature, the hose inner jacket will tend to collapse and fold over on itself in the entire lay is allowed to drain at once. If this does happen, the hose gives the appearance of a twist in the inside jacket. This is not the case and it may be easily removed simply by charging the line and letting it flatten out properly. To properly drain the hose the lay should be broken at every 100 foot or 200 foot connection. As the water is draining, the couplings should be rolled over so that the edges of the hose are in its original lay flat position. This is easily done if the hose still has water in it. Once this is done, the hose will flatten completely in its original form and can then be completely drained by waling it with a bar. It then will pack up in the same amount of space it was originally stored in.

## INSPECTION:

As with all hose, this hose should be service tested and inspected annually. Any physical damage to the hose should be addressed immediately. Although the purpose of the outside jacket is to

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provide protection for the hose, it could be severely damaged and yet the hose still remains completely functional. However, it should never be allowed in service with any known damage. If damage has occurred simply cutting out the affected area and recoupling will resolve the problem. *Be sure to retest after any coupling alteration.* 

Besides the exterior, the interior hose should also be inspected. If damage is evident, hose should be cut back and recoupled. If a problem extends too far down into the hose, it is most likely defective and should be brought to the attention of the OES Fire and Rescue Branch. A proper annual inspection will ensure years of trouble free service, for the safety of the persons using it.

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